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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,877	01/14/2004	Thomas P. Feist	08CN8803-28	5188
23413	7590	08/28/2006	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			KIM, PAUL D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,877

Applicant(s)

FEIST ET AL.

Examiner

Paul D. Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 16-30 is/are pending in the application.
- 4a) Of the above claim(s) 1, 16, 17 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is a response to the election of species filed on 6/26/2006.

Election/Restrictions

1. Newly submitted claims 27-30 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Re. Claim 27: The materials for the plastic surface and the perform core is different than as recited in claims 19 and 21. The originally presented invention does not require in combination of the materials for the plastic surface made of thermoset and the perform core made of a material recited in claim 27.

Re. Claim 28-30: Claim 28 contains a recitation such as a process of disposing a thermoset coating on the reflective layer as recited in line 6, which does not recite in the originally presented invention. The originally presented invention of claim 18 does not require the process of disposing the thermoset coating on the reflective layer.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 27-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly submitted claim 22 filed on 4/14/2005 including a limitation "deposing a thermoset coating on a side of the plastic surface opposite the core" as recited in lines 1-2 was not described in the specification as originally filed and appears to be new matter.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase of "deposing a thermoset coating on a **side** of the plastic surface **opposite** the core" as recited in lines 1-2 renders the claim vague and indefinite. It is unclear as to where the side surface of the plastic surface opposite the core is indicated.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 18-20, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Sandstrom (US PAT. 5,972,461).

Sandstrom teaches a process of making an optical data storage disk comprising steps of: injection molding a substrate formed from two or more layers bonded together (as per claim 25, one of the two or more layers can be a plastic having a plastic surface and another of the two or more layers can be a performed core) with materials such as thermoset (as per claim 20), thermoplastic, metal or glass (as per claims 19 and 26, disclosed in col. 7, lines 4-6); disposing a reflective layer (14) on a surface of the substrate as shown in Fig. 1; wherein the data storage media has an axial displacement peak of less than about 62 microns under shock or vibration excitation (see also col. 11, lines 4-54).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom (US PAT. 5,972,461) in view of Marchon (US PAT. 6,055,140).

Sandstrom teaches all of the limitations as set forth above except a material for the plastic surface. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to apply the material as recited in the claimed invention because Applicant has not disclosed that the material as recited in the claimed invention provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Sandstrom because the material as recited in the claimed invention would perform equally well such as thermoset or thermoplastic material for the substrate in Sandstrom. Therefore, it would have been an obvious matter of design choice to modify the thermoset or thermoplastic material of Sandstrom to obtain the invention as specified in claim 21.

According to Fig. 3 of Sandstrom, in the manufacturing the recording medium, it is well known in the art to provide the thickness of the disk in the range of 0.6 mm to 2.0 mm. Also, typical thickness of the storage medium is about 0.8 to 2.5 mm in light of the specification described in paragraph [0033] on page 8. Therefore, it would also have been an obvious matter of design choice to a person of ordinary skill in the art to modify the thickness of the disk of Sandstrom to obtain the claimed invention as specified in claims 23 and 24.

Response to Arguments

10. Applicant's arguments filed 6/26/2006 have been fully considered but they are not persuasive. Applicant argues that even though the limitation "a side of the plastic surface opposite the core" is merely provided to clearly and definitely claim the invention, it could be any portion of the plastic. Examiner traverses the argument. The coating is not just performed at any portion of the plastic, but a specific place or location on the plastic surface, which is **the side** of the plastic surface **opposite** the core. This recitation was not described in the specification as originally filed and appears to be new matter. In addition, it is still unclear where **the side** of the plastic surface **opposite** the core is indicated. The coating process could not be performed at any portion of the plastic surface.

Applicant also argues that the prior art of record fails to disclose the claimed invention such as injection molding a substrate comprising a plastic surface and a performed core. Examiner traverses the argument. Sandstrom teaches that the high-flow polycarbonate material is typically used to produce the recording medium and the high-flow polycarbonate has a sufficiently low viscosity **to fill the mold by injection molding** without forming flow mask (col. 7, lines 15-26). In addition, the high-flow polycarbonate substrate can be formed from a single or two or more layers bonded together. Therefore, one of the two or more layers of the substrate can be formed by the injection molding to another of the two or more layers.

Applicant argues that the prior art of record fails to disclose the thickness as recited in the claimed invention such as up to about 1.2 mm. Examiner traverses the

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argument that the thickness between 0.6 mm to 2.5 mm for the recording medium is well known and commonly used for manufacturing the recording medium. It is to be expected that a small change in physical attributes would be an unpatentable modification. Under some circumstance, a small change in physical attributes may impact patentability to a process if particular ranges claimed produce a new and unexpected result, which is different in kind, and not merely in degree from the result of the prior art. Such ranges are termed "critical" ranges, and the applicant has the burden of proving such criticality. However, even though applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art. More particularly, where the general conditions of claims are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In this instance applicant has failed to establish the specific thickness as claimed is critical and amount to more than a small numerical change from the prior art. Therefore, it would have been an obvious matter of design choice to modify the thickness of the disk of Sandstrom to obtain the claimed invention.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

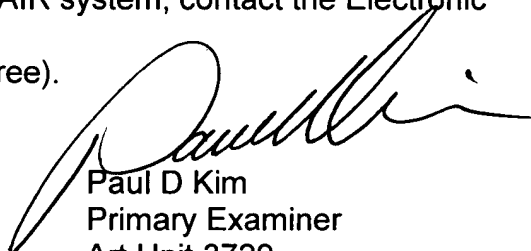
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Thursday between 6:00 AM to 2:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim
Primary Examiner
Art Unit 3729